REMARKS

Reconsideration is respectfully requested.

35 USC § 112, 2ND PARAGRAPH

The Examiner has rejected Claims 1, 7, 12, 15, 31, 35-38, and 40-55, under 35 USC § 112, as "being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention".

Claims 1, 7, 12, 55, and their dependents were rejected "because it is not clear what constitutes a user-friendly, effective additive". With respect to Claim 12, such language does not appear in Claim 12; however, it does appear in Claim 19. Applicant believes that the Examiner intended to reject Claim 19—not Claim 12—and addresses Claim 19 instead of Claim 12. Applicant has amended Claims 1, 7, 19, and 55 to cite a "comprehensive fuel additive" instead of a "user-friendly, effective additive". Applicant clearly uses and defines the phrase "comprehensive fuel additive" in applicant's specification. See, e.g., Applicant's Specification p. 17, lines 13-15.

Claim 15 was rejected for containing the trademark/trade names DCI 6A, DMA 558, and A022. Applicant has provided evidence, in the form of a declaration, to the fact that, in the automotive industry, fuel additives do not change formulation without also always changing the formulation name. *See* attached Declaration of Edward R. Eaton. Military, government, and corporate fuel additive specifications require specific, exact, unchanging formulations which are cited by the specific, exact, and unchanging name of the formulation. Applicant is forced to use trademarks as chemical descriptors because these formulations are typically trade secrets that applicant cannot describe in any other way. In this patent application, the trademarks/trade names *do* clearly identify the goods. The claim scope is not uncertain because the names *do* properly identify a specific material.

Claim 15 was also rejected "because it is not clear why components c) and h) are the same components". Component c) comprises about 2 volume percent DCI 6ATM as a corrosion inhibitor. Component h) comprises about 2 volume percent DCI 6ATM as a fuel lubricant. DCI 6ATM contains ingredients that perform both functions independently. Applicant has amended Claim 15 for clarity.

Claim 31 was rejected for containing the trademark/trade names T9312, DCI 6A, AROL 50, DMA 558, and OLI 501 5. Applicant has provided evidence, in the form of a declaration, to the fact that, in the automotive industry, fuel additives do not change formulation without also always changing the formulation name. *See* attached Declaration of Edward R. Eaton. Military, government, and corporate fuel additive specifications require specific, exact, unchanging formulations which are cited by the specific, exact, and unchanging name of the formulation. Applicant is forced to use trademarks as chemical descriptors because these formulations are typically trade secrets that applicant cannot describe in any other way. In this patent application, the trademarks/trade names *do* clearly identify the goods. The claim scope is not uncertain because the names *do* properly identify a specific material.

Claim 31 was also rejected in that it was "not clear why components d) and e) are the same components". Component d) comprises about 5 volume percent DMA 451TM as a water manager. Component e) comprises about 5 volume percent DMA 451TM as a detergent. DMA 451TM contains ingredients that perform both functions independently. Applicant has amended claim 31 for clarity.

As the Examiner suggested, Claim 35 has been amended to insert the term –and– between components s) and t).

Claim 35 was rejected "because the claim contains generic alcohols and ethers and it contains specific alcohols and ethers". Applicant has amended Claim 35 by removing the generic phrases "alcohols" and "ethers".

Claim 36 was rejected for containing the trademark/trade names DCI products, HITEC 580, BIOBOR JF, and ONDEO-NALCO 5403. Applicant has provided evidence, in the form of a declaration, to the fact that, in the automotive industry, fuel additives do not change formulation without also always changing the formulation name. *See* attached Declaration of Edward R. Eaton. Military, government, and corporate fuel additive specifications require specific, exact, unchanging formulations which are cited by the specific, exact, and unchanging name of the formulation. Applicant is forced to use trademarks as chemical descriptors because these formulations are typically trade secrets that applicant cannot describe in any other way. In this patent application, the trademarks/trade names *do* clearly identify the goods. The claim scope is not uncertain because the names *do* properly identify a specific material.

Claim 37 was rejected for containing the trademark/trade name DMA 451. Applicant has provided evidence, in the form of a declaration, to the fact that, in the automotive industry, fuel additives do not change formulation without also always changing the formulation name. *See* attached Declaration of Edward R. Eaton. Military, government, and corporate fuel additive specifications require specific, exact, unchanging formulations which are cited by the specific, exact, and unchanging name of the formulation. Applicant is forced to use trademarks as chemical descriptors because these formulations are typically trade secrets that applicant cannot describe in any other way. In this patent application, the trademarks/trade names *do* clearly identify the goods. The claim scope is not uncertain because the names *do* properly identify a specific material.

Claim 38 was rejected for containing the trademark/trade name DMA products. Applicant has provided evidence, in the form of a declaration, to the fact that, in the automotive industry, fuel additives do not change formulation without also always changing the formulation name. *See* attached Declaration of Edward R. Eaton. Military, government, and corporate fuel additive specifications require specific, exact, unchanging formulations which are cited by the specific, exact, and unchanging name of the formulation. Applicant is forced to use trademarks as chemical descriptors because these formulations are typically trade secrets that applicant cannot describe in any other way. In this patent application, the trademarks/trade names *do* clearly identify the goods. The claim scope is not uncertain because the names *do* properly identify a specific material.

Claim 38 was rejected "because components e) and g) are duplicates". Applicant has amended Claim 38 to remove component e).

As the Examiner suggested, Claim 38 has been amended to place the term –a– before each named component in j)-n).

As the Examiner suggested, Claim 38 has been amended to place the term –and– between components o) and p).

As the Examiner suggested, Claim 39 has been amended to place the term –and– between components e) and f).

Claim 40 was rejected for containing the trademark/trade names A0 22 and A0 series. Applicant has provided evidence, in the form of a declaration, to the fact that, in the automotive industry, fuel additives do not change formulation without also always changing the formulation name. See attached Declaration of Edward R. Eaton. Military, government, and corporate fuel additive specifications require specific, exact, unchanging formulations which are cited by the specific, exact, and unchanging name of the formulation. Applicant is forced to use trademarks as chemical descriptors because these formulations are typically trade secrets that applicant cannot describe in any other way. In this patent application, the trademarks/trade names do clearly identify the goods. The claim scope is not uncertain because the names do properly identify a specific material.

As the Examiner suggested, Claim 40 has been amended to place the term –and– between components h) and i).

Claim 41 was rejected for containing the trademark/trade names ONDEO-NALCO 303MC; and BIOBOR JF. Applicant has provided evidence, in the form of a declaration, to the fact that, in the automotive industry, fuel additives do not change formulation without also always changing the formulation name. *See* attached Declaration of Edward R. Eaton. Military, government, and corporate fuel additive specifications require specific, exact, unchanging formulations which are cited by the specific, exact, and unchanging name of the formulation. Applicant is forced to use trademarks as chemical descriptors because these formulations are typically trade secrets that applicant cannot describe in any other way. In this patent application, the trademarks/trade names *do* clearly identify the goods. The claim scope is not uncertain because the names *do* properly identify a specific material.

Claim 41 was rejected "because components f) and g) are suffixes and not Compounds". Applicant has amended f) to "Dithiocarbamates" and has amended g) to "thiones".

Claim 42 was rejected for containing the trademark/trade names DCI products and ONDEO-NALCO 5403. Applicant has provided evidence, in the form of a declaration, to the fact that, in the automotive industry, fuel additives do not change formulation without also always changing the formulation name. *See* attached Declaration of Edward R. Eaton. Military, government, and corporate fuel additive specifications require specific, exact, unchanging formulations which are

cited by the specific, exact, and unchanging name of the formulation. Applicant is forced to use trademarks as chemical descriptors because these formulations are typically trade secrets that applicant cannot describe in any other way. In this patent application, the trademarks/trade names *do* clearly identify the goods. The claim scope is not uncertain because the names *do* properly identify a specific material.

As the Examiner suggested, Claim 42 has been amended to place the term –and– between compounds g) and h).

Claim 43 was rejected for containing the trademark/trade name HITEC 3023. Applicant has provided evidence, in the form of a declaration, to the fact that, in the automotive industry, fuel additives do not change formulation without also always changing the formulation name. *See* attached Declaration of Edward R. Eaton. Military, government, and corporate fuel additive specifications require specific, exact, unchanging formulations which are cited by the specific, exact, and unchanging name of the formulation. Applicant is forced to use trademarks as chemical descriptors because these formulations are typically trade secrets that applicant cannot describe in any other way. In this patent application, the trademarks/trade names *do* clearly identify the goods. The claim scope is not uncertain because the names *do* properly identify a specific material.

As the Examiner suggested, Claim 43 has been amended to place the term –and– between components e) and f).

Claim 44 was rejected for claiming specific alcohols in components a)-c), and generic alcohols in component j). Applicant has amended Claim 44 to remove component j).

Claim 44 was rejected for claiming generic polymers in addition to specific polymers. Applicant has amended Claim 44 to remove component g).

As the Examiner suggested, Claim 44 has been amended to place the term –and– between components j) and k).

Claim 45 was rejected "because tert-amyl alcohol and tert-butyl alcohol appear twice in the claim". Applicant has amended Claim 45 to remove the duplicates.

Claim 45 was rejected for claiming specific alcohols in components a, k and r-w, and generic alcohols in component x). Applicant has amended Claim 45 to remove component x).

Claim 45 was rejected for claiming specific ethers in components n-q and generic ethers in component y). Applicant has amended Claim 45 to remove component y).

As the Examiner suggested, Claim 46 has been amended to place the term –and– between components n) and o).

Claim 46 was rejected for containing the trademark/trade names DCI products, HITEC 580, BIOBOR JF, and ONDEO-NALCO 5403. Applicant has provided evidence, in the form of a

declaration, to the fact that, in the automotive industry, fuel additives do not change formulation without also always changing the formulation name. *See* attached Declaration of Edward R. Eaton. Military, government, and corporate fuel additive specifications require specific, exact, unchanging formulations which are cited by the specific, exact, and unchanging name of the formulation. Applicant is forced to use trademarks as chemical descriptors because these formulations are typically trade secrets that applicant cannot describe in any other way. In this patent application, the trademarks/trade names *do* clearly identify the goods. The claim scope is not uncertain because the names *do* properly identify a specific material.

Claim 47 was rejected for containing trademarks/trade names for components a-e. Applicant has provided evidence, in the form of a declaration, to the fact that, in the automotive industry, fuel additives do not change formulation without also always changing the formulation name. *See* attached Declaration of Edward R. Eaton. Military, government, and corporate fuel additive specifications require specific, exact, unchanging formulations which are cited by the specific, exact, and unchanging name of the formulation. Applicant is forced to use trademarks as chemical descriptors because these formulations are typically trade secrets that applicant cannot describe in any other way. In this patent application, the trademarks/trade names *do* clearly identify the goods. The claim scope is not uncertain because the names *do* properly identify a specific material.

Claim 48 was rejected for containing trademarks/trade names for components a)-i). Applicant has provided evidence, in the form of a declaration, to the fact that, in the automotive industry, fuel additives do not change formulation without also always changing the formulation name. See attached Declaration of Edward R. Eaton. Military, government, and corporate fuel additive specifications require specific, exact, unchanging formulations which are cited by the specific, exact, and unchanging name of the formulation. Applicant is forced to use trademarks as chemical descriptors because these formulations are typically trade secrets that applicant cannot describe in any other way. In this patent application, the trademarks/trade names do clearly identify the goods. The claim scope is not uncertain because the names do properly identify a specific material.

Claim 48 was rejected for having duplicate components l) and n). Applicant has amended Claim 48 to remove component l).

As the Examiner suggested, Claim 48 has been amended to place the term –and– between components v) and w).

Claim 49 was rejected for containing the trademark/trade names AROL 50 and HISOL 100. Applicant has provided evidence, in the form of a declaration, to the fact that, in the automotive industry, fuel additives do not change formulation without also always changing the formulation name. *See* attached Declaration of Edward R. Eaton. Military, government, and corporate fuel additive specifications require specific, exact, unchanging formulations which are cited by the specific, exact, and unchanging name of the formulation. Applicant is forced to use trademarks as chemical descriptors because these formulations are typically trade secrets that applicant cannot describe in any other way. In this patent application, the trademarks/trade names *do*

clearly identify the goods. The claim scope is not uncertain because the names *do* properly identify a specific material.

Claim 49 has been amended to place the term –and– between components h) and i).

Claim 50 was rejected for containing the trademark/trade names DMA 558 and DMA SERIES PRODUCTS. Applicant has provided evidence, in the form of a declaration, to the fact that, in the automotive industry, fuel additives do not change formulation without also always changing the formulation name. *See* attached Declaration of Edward R. Eaton. Military, government, and corporate fuel additive specifications require specific, exact, unchanging formulations which are cited by the specific, exact, and unchanging name of the formulation. Applicant is forced to use trademarks as chemical descriptors because these formulations are typically trade secrets that applicant cannot describe in any other way. In this patent application, the trademarks/trade names *do* clearly identify the goods. The claim scope is not uncertain because the names *do* properly identify a specific material.

Claim 50 has been amended to place the term –and– between components f) and g).

Claim 51 was rejected for containing trademarks/trade names for components a), b), and d)-f). Applicant has provided evidence, in the form of a declaration, to the fact that, in the automotive industry, fuel additives do not change formulation without also always changing the formulation name. *See* attached Declaration of Edward R. Eaton. Military, government, and corporate fuel additive specifications require specific, exact, unchanging formulations which are cited by the specific, exact, and unchanging name of the formulation. Applicant is forced to use trademarks as chemical descriptors because these formulations are typically trade secrets that applicant cannot describe in any other way. In this patent application, the trademarks/trade names *do* clearly identify the goods. The claim scope is not uncertain because the names *do* properly identify a specific material.

Claim 51 was rejected in that "components k) and l) are suffixes and are not Compounds". Applicant has amended k) to "Dithiocarbamates" and has amended l) to "thiones".

As the Examiner suggested, Claim 51 has been amended to place the term –and– between components n) and o).

Claim 52 was rejected for containing trademarks/trade names for components a)-g). Applicant has provided evidence, in the form of a declaration, to the fact that, in the automotive industry, fuel additives do not change formulation without also always changing the formulation name. *See* attached Declaration of Edward R. Eaton. Military, government, and corporate fuel additive specifications require specific, exact, unchanging formulations which are cited by the specific, exact, and unchanging name of the formulation. Applicant is forced to use trademarks as chemical descriptors because these formulations are typically trade secrets that applicant cannot describe in any other way. In this patent application, the trademarks/trade names *do* clearly identify the goods. The claim scope is not uncertain because the names *do* properly identify a specific material.

As the Examiner suggested, Claim 52 has been amended to place the term –and– between components i) and j).

Claim 53 was rejected for containing the trademark/trade names HITEC 3023 and ALKEN EVEN FLO 910. Applicant has provided evidence, in the form of a declaration, to the fact that, in the automotive industry, fuel additives do not change formulation without also always changing the formulation name. *See* attached Declaration of Edward R. Eaton. Military, government, and corporate fuel additive specifications require specific, exact, unchanging formulations which are cited by the specific, exact, and unchanging name of the formulation. Applicant is forced to use trademarks as chemical descriptors because these formulations are typically trade secrets that applicant cannot describe in any other way. In this patent application, the trademarks/trade names *do* clearly identify the goods. The claim scope is not uncertain because the names *do* properly identify a specific material.

As the Examiner suggested, Claim 53 has been amended to place the term –and– between components g) and h).

Claim 54 was rejected for claiming specific alcohols in components b), c), and e) and generic alcohols in component a). Applicant has amended Claim 54 to remove component a).

Claim 54 was rejected for claiming generic polymers in addition to specific polymers. Applicant has amended Claim 54 to remove component i).

As the Examiner suggested, Claim 54 has been amended to place the term –and– between components k) and l).

Therefore, applicant submits that Claims 1, 7, 19, 15, 31, 35-38, and 40-55 are not indistinct as suggested by the Examiner. Applicant believes that all Claims, as amended, are now in proper order with respect to 35 USC §112, 2nd paragraph, and respectfully requests that all such rejections be withdrawn.

35 USC §103

The Examiner, by making only a §103 rejection, has in effect rightly admitted that applicant's invention is new. The only issue remaining is whether there has been sufficient creativity to merit patentability.

Regarding the rejection of Claims 1-14, 19-30, 35, 37-42, 44, 45, 47-52, and 54-60 under 35 USC §103, applicant respectfully submits that the Examiner has not established a *prima facie* case of obviousness. The rejection is therefore improper. The Federal Circuit has stated, "If examination at the initial stage does not produce a *prima facie* case of unpatentability, then without more the applicant is entitled to the grant of the patent." *In re Oetiker*, 977 F.2d 1443, 1445, 24 USPQ2d 1443 (Fed. Cir. 1992). For the examiner to establish a *prima facie* case of obviousness, the Examiner must establish that the teachings from the prior art itself would appear to have <u>suggested</u> the claimed subject matter to a person of ordinary skill in the art. *In re*

Bell, 991 F.2d 781, 783, 26 USPQ2d 1529, 1531 (Fed Cir. 1993) (quoting *In re Rinehart*, 531 F.2d 1048, 1051 (CCPA 1976)) (emphasis added). No such teaching or suggestion has been made, and the Examiner has not set forth any evidence as to why applicant's invention is unpatentable. Applicant respectfully submits that applicant's invention is entitled to a patent.

The Examiner states, "Cunningham teaches the limitations of the claims other than the differences that are discussed below". Applicant respectfully disagrees. The Cunningham reference does not teach the limitations of applicant's claims as discussed below.

It is apparently the Examiner's position that since fuel additive packs with a stable shelf-life exist (the Cunningham reference) that any novel combination of components used as a fuel additive to solve a completely different problem is automatically obvious. The Examiner states, "Cunningham differs from the claims in that he does not specifically teach a composition wherein all the components are present. However, no unobvious is seen in this difference because Cunningham teaches all of the claimed components and he teaches that they may be combined to produce an additive package". Examiner's Detailed Action, page 14. This statement by the Examiner clearly does not establish a *prima facie* case of obviousness. For the record, former Chief Judge Markey of the Federal Circuit has stated, "virtually all inventions are 'combinations', and ... every invention is formed of 'old elements' ... Only God works from nothing. Man must work with the elements." H.T. Markey, *Why Not the Statute?*, 65 J. Pat. Off. Soc'y 331, 333-34 (1983). The Examiner's position that applicant's eight-function fuel additives are obvious is a mere *ipse dixit* of the Examiner; and if the Examiner persists with this position, applicant respectfully requests that the Examiner submit an Affidavit to that effect.

It is well settled that to support an obviousness rejection, the prior art must contain some teaching or suggestion to make the modifications suggested by the Examiner. In this regard, the Federal Circuit has stated, "The mere fact that the prior art may be modified in the manner suggested by the Examiner does not make the modification obvious unless the prior art suggested the desirability of the modification." In re Fritch, 23 USPQ 2d 1780, 1783-84 (Fed. Cir. 1992) (emphasis added). The Examiner essentially argues that any combination of the components discussed in the Cunningham reference, even if not enabled, would be obvious. Applicant respectfully submits that the Cunningham reference does not teach all of applicant's claimed components and that Cunningham provides no teaching or suggestion to modify the components in the Cunningham reference to result in applicant's claimed invention. In response to the Examiner's statement that the Cunningham reference cites that other components may be used in the additive package (see col. 5, lines 64-68): applicant respectfully submits that such a statement, without any suggested quantities or formulas, is not an enabling disclosure. The Cunningham reference does not teach or suggest useful, finished formulas for treating the entire spectrum of fuel quality problems, as applicant does. Further, Cunningham does not teach or suggest a need for a comprehensive fuel additive. Cunningham merely provides a recipe for enhancing the shelf-life of one particular type of detergent additive. Further, the Cunningham reference does not teach or suggest the desirability of a fuel additive having each and every of applicant's functions.

Further, the Cunningham reference concerns itself with enhancing shelf-life stability for long-term storage. The Cunningham reference makes numerous references to shelf-life stability. See,

e.g., abstract; see also col. 1, line 7, lines 34-36, lines 45-46, lines 61-63, etc. The Cunningham reference states, "it is an object of this invention to provide a stable fluid additive package for long term storage". Cunningham, col. 1, lines 34-38. Applicant's endeavor is completely different.

It is an object and feature of this invention to provide a comprehensive-single-addition transportation fuel additive. It is a further object and feature of this invention to provide a comprehensive transportation fuel additive that can be tailored to the needs of local fuels. It is a further object and feature of this invention to provide a comprehensive fuel additive that compensates for the low quality of transportation fuels in underdeveloped countries. It is a further object and feature of this invention to provide a comprehensive fuel additive that is easy to add to finished fuels. It is a further object and feature of the present invention to provide comprehensive fuel additive systems for motor and diesel fuels. It is yet a further object and feature of this invention to provide useful means of selling and distributing the comprehensive fuel additive. Applicant's specification, p. 3.

Applicant has been the first to both recognize the problems with transportation fuel in underdeveloped countries, and in response to such problems has proposed and developed a comprehensive fuel additive designed to counteract such problems. Further, it is well settled that when a longstanding problem is recognized (these problems in underdeveloped countries are not new), and the solution to that problem is new and creative, even a straightforward march to the solution is patentable.

Even further, the Examiner has stated, without evidence, that it would have been obvious to one of ordinary skill in the art at the time the invention was made "to optimize the proportions of the additive components through routine experimentation for the best results" relying primarily on *In re Boesch*, 617 F.2d 272, 276, 205 USPQ 215, 219 (CCPA 1980). Applicant respectfully submits that *In re Boesch* is not applicable to the present case. *In re Boesch* dealt with the question of whether or not optimizing a "result effective variable" in a known process is ordinarily within the skill of the art. A result effective variable is a variable which achieves a recognized result. MPEP 2144.05(II)(B). In the present case we are not dealing with a result effective variable. The present case deals with a completely different problem. Further, the present patent application deals with a new solution to the problems associated with transportation fuels in underdeveloped countries. Further, applicant's invention deals with balancing at least eight functional components to meet the local conditions of each country in which applicant sells fuels.

The Examiner's apparent position that eight-function fuel additives are obvious and well known in this art is a mere *ipse dixit* of the Examiner; and if the Examiner persists with this position, applicant respectfully requests that the Examiner submit an Affidavit to that effect. It is respectfully submitted that rejection of Claims 1-14, 19-30, 35, 37-42, 44, 45, 47-52 and 54-60 should be withdrawn.

Applicant respectfully points out, that according to MPEP 706, "The goal of examination is to clearly articulate any rejection early in the prosecution process so that the applicant has the

opportunity to provide evidence of patentability and otherwise reply completely at the earliest opportunity," and "the examiner should never overlook the importance of his or her role in allowing claims which properly define the invention."

In view of the above comments, all of the presently amended and pending Claims in this application are believed to be in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to withdraw any outstanding rejections of the Claims and to allow this application.

If there are any fees incurred by this Amendment Letter, please deduct them from our Deposit Account NO. 50-1887.

Applicant respectfully requests (not as a matter of form but as a special request in this case) that the Examiner, after having an opportunity to review this Office Action Response, grant a telephonic interview to Applicant's undersigned agent in order to discuss Applicant's response to the Examiner's first Office Action (before the Examiner prepares a second office action), to attempt to reach mutual understanding and clarify any outstanding issues. Applicant respectfully requests that the Examiner call Applicant's undersigned agent at 602-263-9200 to schedule a telephonic interview at least two business days in advance to allow the Applicant's undersigned agent time to prepare and schedule the interview. For telephonic scheduling purposes, Applicant's agent is located in Arizona, in the Mountain Standard Time zone.

Respectfully submitted,

Date: May 28, 2007 /Michael D. Volk Jr./

Michael D. Volk Jr. (59,338) 3113 North 3rd Street Phoenix, AZ 85012 (602) 263-9200 Attorney for Applicant